

# **VXP** SERIES

# Professional loudspeakers





### Introduction

Designed and engineered in a unique partnership between Tannoy and Lab.gruppen, the VXP Series comprises a range of powered (active) loudspeakers for demanding professional and commercial sound applications. Each incorporates acclaimed Dual Concentric driver technology in tandem with on-board powering by Lab.gruppen's IDEEA<sup>TM</sup> (IntelliDrive Energy Efficient Amplifier) module.

This Quick Start Guide presents only the essential information required to properly unpack, connect and place the unit in operation. Please consult the full VXP Series User Manual for additional information on system configuration, limiting functions, rigging and safety procedures, and warranty coverage. The VXP Series User Manual is available at www.tannov.com.

# **Important Safety Instructions**



The lightning flash with arrowhead symbol within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage " within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

- 1. Read these instructions.
- 2. Keep these instructions
- Heed all warnings.
- 4. Follow all instructions.
- 5. Do not use this apparatus near water.
- 6. Clean only with a dry cloth.
- 7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers that produce heat.
- 9. Only use attachments/accessories specified by the manufacturer.
- 10. Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- 11. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 12.Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injurt from tip-over.
- Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14 Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged. liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

#### SAFETY WARNING

Do not remove any covers, loosen any fixings or allow items to enter any aperture.

#### SAFETY WARNING

Objects filled with liquids should not be placed on this apparatus.

#### **AVERTISSEMENT DE SECURITE**

Ne retirez pas les couvercles, ne desserrez pas les fixations et ne laissez aucune pièce s'introduire dans les ouvertures.

#### **AVERTISSEMENT DE SECURITE**

Ne placez pas d'objets contenant du liquide à proximité de l'appareil

### **Unpacking and Visual Checks**

Every Tannoy VXP product is carefully tested and inspected before being packaged and leaving the factory. After unpacking your loudspeaker, please inspect for any exterior physical damage, and save the carton and any relevant packaging materials in case the loudspeaker again requires packing and shipping. In the event that damage has been sustained in transit, please notify your dealer immediately.

### **Rear Interface Panel**

**XLR FEMALE AUDIO INPUT** - This is a lockable XLR line input socket for connection to the audio source. Fully balanced: pin 2 hot (+), pin 3 cold (+), & pin 1 ground.

**XLR MALE AUDIO LINK** - This is a lockable XLR line output socket to link additional speakers. Fully balanced: pin 2 hot (+), pin 3 cold (+), & pin 1 ground.

**POWER MODE SWITCH (top)** – Selects AUTO or MANUAL power on/off mode.

HPF MODE SWITCH - Inserts or removes 90 Hz high pass filter.

**LEVEL CONTROL** – Recessed potentiometer for adjustment of speaker volume.

#### **LED INDICATORS** – Top to bottom:

Limit protect indicates activity of built-in speaker protection limiter. Signal indicates when audio signal is present at the input. Power state indicates that AC line power is present at the AC mains connector, and that the power switch is turned on.

**ROCKER POWER SWITCH** - Supplies AC power on to the unit (100V - 240V)

**AC MAINS CONNECTOR** - Neutrik powerCON mains connector (mating connector supplied)

# **System Configuration**

All loudspeakers in the VXP range are integrated designs which include system specific EQ and protection circuitry, without the need for external amplification. For room equalization, delay and other commissioning or setup functions, we recommend you use a Vnet SC1 or TDX1 Digital Controller. Please refer to the full VXP Series manual.

### **AC Power Requirements**

VXP products are equipped with Neutrik powerCON mains connectors which mate with the Neutrik NAC3FCA Cable connector, providing quick lock with a securing lever at power-in. This AC mains connector is supplied with each VXP product.

The IDEAA™ module in VXP loudspeakers has a universal power supply. It will operate on any AC mains supply from 70 V to 265 V (+/- 10%) at 50 or 60 Hz, although with reduced power output capability at the low voltage extremes. This allows continued operation even when using long, thin power cables, or when powered from portable generators that are unable to maintain full nominal voltage.

### **Auto and Manual Power Modes**

VXP loudspeakers offer two modes for power on/off.

**AUTO mode** – This is the default mode as delivered. AUTO engages the auto-power-down (APD) feature which puts the IDEAA™ module in STANDBY if no input signal is detected for a period of 20 minutes. The auto-power-on (APO) turns the module on in less than 2 seconds after a signal is present at the input.

**MANUAL mode** – The power mode may be switched to MANUAL to disable the auto-power-down and auto-power-on functions. This allows use of an external power sequencer or manual control.

# Cooling

Do not install this equipment in an enclosed space. Do not limit free ventilation and movement of air around the back panel. Ensure that there is at least 100mm (4") of space around all sides of the product for ventilation. VXP products do not have cooling fans; the highly efficient switch mode power supply and proprietary Class D output stage have low current draw and therefore require only the convection cooling provided by the rear panel heat sink.

### **LED Functions**

**Limit LED** - When illuminated this indicates that the system is approaching clipping. An occasional flicker of the red LED on the loudest peaks is acceptable. If this LED remains red for more than the duration of brief dynamic peaks, or lights continuously then the system is being overdriven. If the red LED illuminates excessively:

- Reduce the input level (see interface panel)
- Reduce the output level of the mixer, or other source to the speaker.

**Signal LED** – The Green LED indicates that a useable signal is present at the input.

**Power LED** – When AC mains is connected to the speaker and the power switch is turned on, the blue lower LED will illuminate.

### **Audio Connections**

The signal input & link connectors are fully balanced. When connecting a balanced signal be sure to wire to the following standard:

SIGNAL XLR CONNECTOR

Hot (+) Pin 2
Cold (-) Pin 3
Shield (GND) Pin 1

In a standard balanced interconnection there are two signal conductors and a shield. The shield is normally referenced to ground at one or both ends. Many times the shield is lifted at one end, usually at the input to eliminate "ground loops" or noise. This should be done only as a last resort; although it will reduce hum, the shields can act as radio antennas and pick up radio frequency interference from the environment.

Multiple enclosures may be driven from a single audio source; simply plug the signal source output into the first XLR input socket, and patch that speaker's XLR link to the next speaker's XLR input socket.

### **Gain Structure and Limiting**

The VXP gain structure is designed to allow a low-level source device to drive the loudspeaker to full output. Maximum specified SPL will be achieved with a 4 dBu input signal. There is sufficient headroom in the signal path to accommodate input levels of 10 or even 20 dBu, with high quality compression engaged as needed to maintain sonic integrity without clipping.

### **Equalisation**

The VXP loudspeaker requires no equalisation or correction to overcome system limitations; equalisation is necessary only to compensate for difficult acoustic environments.

# **Rigging and Safety Procedures**

The installation of Tannoy Professional loudspeakers using the dedicated hardware should carried out only by fully qualified installers, in accordance with all the required safety codes and standards that are applied at the place of installation.

WARNING: As the legal requirements for flying change from country to country, please consult your local safety standards office before installing any product. We also recommend that you thoroughly check any laws and bylaws prior to installation. For more detailed information on rigging hardware and safety procedures, please consult the full VX Series and VXP Series Hardware Manual available at www.tannov.com.